FUNGI WALK at HODGEMOOR WOOD, September 15th 2018

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I'm delighted and also relieved to be reporting that after last weekend's somewhat disappointing first excursion of the season to Finemere Wood, we had an excellent morning at Hodgemoor today with a team of 10 and more than enough fungi to keep us entertained. I tend to glance through the previous year's report before writing up each event, particularly if it was on a similar date. At Hodgemoor last year – just a week earlier in September – we had a larger group of people and recorded more species than today yet the report features a completely different set of photos – all things we didn't see today, reflecting just how unpredictable and fascinating fungal fruiting is. Today's list of just under 70 species was most encouraging and something I'd not have thought possible after the miserable 21 species last week, especially with apparently only insignificant rainfall between the two events. Fingers crossed that this trend continues!

Early September is normally (if anything about fungi can be said to be normal!) the best time to find mycorrhizal species – those that have their mycelium (equivalent of plant roots) attached to living roots (most often trees) with which they have a year-round mutually beneficial relationship by exchanging nutrients but only sending up fruit bodies in Autumn. Belonging to this group we found today Boletes and Russulas (the Brittlegills) in good numbers, also Amanitas, *Lactarius* (Milkcaps), *Hebeloma* (Poison Pies) and *Inocybe* (Fibrecaps) in considerably lesser numbers. Missing entirely were *Cortinarius*, *Tricholoma* and most surprisingly *Laccaria* (the Deceivers). I'll discuss the Boletes first because if we adopt the most recent names for the ever-increasing number of genera which have a cap with pores underneath and a stem, I find that only one of the 8 species that were identified, *Boletus edulis* (Cep, Penny Bun), still retains the genus name *Boletus*! This state of affairs (somewhat confusing particularly for the amateur just embarking upon coming to terms with fungal names) is the result of ongoing international molecular studies with DNA enabling groups of species which were traditionally placed together to be split up. (Incidentally, for a handbook which includes both the old and most recent names, I'd strongly recommend Geoffrey Kibby's Mushrooms & Toadstools of Britain & Europe vol 1 (vol 2 is still in preparation!). His coverage of the Boletes, also *Russula* and *Lactarius* and much more is superb.)

We found two Boletes today in which the yellow flesh turns instantly blue when exposed to air – always a nice trick for the leader to impress with! The first of these - I named it *Boletus luridiformis* (Scarletina Bolete) at the time, though it was perhaps better known as *B. erythropus,* but now find it's genus name is *Neoboletus* - is quite common and sports red pores which makes it quite easy to recognise. The second we found is much more unusual: a smaller species which has yellow pores but stains really markedly dark blue when handled or cut. This was ***Boletus pulverulentus*** (Inkstain Bolete and now in the genus ***Cyanoboletus***). We have a handful of known county sites for this but Hodgemoor has the most records - a nice find today.

Above, *Cyanoboletus pulverulentus*, a small and unusual member of the Boletes found today. The amazing colour change was instantaneous when I cut it in half . (CD)

Just a quick mention of another quite unusual Bolete which turned up though only as a large but immature 'button' (very similar to the centre photo below) which could mislead one to think it was a young *Boletus edulis*. This was ***Leccinum crocipodium*** (Saffron Bolete) – a species not that unusual at Hodgemoor but only known from three other Bucks sites. The character which confirms its identity is not just its yellowish brown cap colour but the fact that the whole fruit body blackens where damaged including the stem flesh which first turns dirty pink when exposed to air. Most *Leccinum* species grow under Birch but this one is mycorrhizal with Oak, the predominant tree species here. We don't have a photo of today's specimen but I include images taken at this site previously.



Above, three images of *Leccinum crocipodium* taken previously at Hodgemoor. Left: note the blackening visible on the cap, pores and stem where it had been handled; centre: note the deliberate scratch on the stem just beginning to turn a bit pink; right, note the same scratch having turned black after 30 minutes or so. (PC)

Towards the end of the morning I noticed a cluster of distinctive Bolete fruit bodies under a large Beech. The reddish brown caps with very firm flesh, also the bright yellow pores and stems, rang a bell but it was not until I checked it at home that I felt confident to name it *Boletus appendiculatus* (now ***Butyriboletus appendiculatus*** – Oak Bolete). Yes, it was under Beech today but the English name is somewhat misleading because its host trees are both Beech and Oak. This is just the 5th time it's been found in Bucks with only two other known county sites.

Left, *Butyriboletus appendiculatus* found under Beech today (PC)

Moving on, the varied and colourful genus *Russula* (Brittlegill) was much admired today with 10 different species recorded (not an unusual occurrence at this site) and in some spots fruiting quite prolifically. Surprisingly three of the most common Brittlegill species in the Chilterns are absent from our list (namely *Russula ochroleuca*, *R. nobilis* and *R. atropurpurea*) but the very common *R. nigricans* (Blackening Brittlegill) was abundant and dutifully demonstrated how the

white flesh when cut turns slowly red and then eventually black. Of particular note were two yellow species, neither of them very common and in quite a few years absent from our lists. Both took me a few minutes to recognise when they were presented to me but the penny (forgive the pun) eventually dropped. The first has a very matt slightly greenish yellow cap with a rubbery cuticle (skin) which resists peeling, also firm flesh, but the give-away clue is the pale violet patches on the stem (sometimes really marked but not always present). This was ***Russula violeipes*** (Velvet Brittlegill), a species associated with Oak and Beech and known from 6 other county sites though with the majority of records from Hodgemoor.

Right, *Russula violeipes* which was much in evidence today. Note the violet markings on the right hand stem which give rise to its Latin species name, however these were missing from the lower stem. (CD)

The second (very different) yellow *Russula* we found has a dirty ochre-yellow to brownish cap which is shiny and soft-fleshed and belongs to a group of Brittlegills affectionately known as 'the smellies'. Most are quite similar in appearance, are found under Oak and have an unpleasant sour smell but this one boasts a strong sweet smell of almonds or marzipan. The moment I put today's collection to my nose I knew what it was***. Russula grata*** (Bitter Almond Brittlegill – in most books as *R. laurocerasi*) is not very common: this was the only second time we've recorded it here with just 3 other known county sites. (Sorry, no image available.)

Species of Brittlegills with caps of some shade of red abound - at a rough estimate well over 50! We found 4 today: ***R. vesca*** (The Flirt) is common and can be recognised with practice having a cap the colour of gammon and a cap margin where the cuticle tends to lift away revealing the white gills. It also shows an instant strong bright salmon colour reaction when the white stem is rubbed with a crystal of iron salts, demonstrated today.

Left, *Russula vesca* today showing the possible variation in cap colour and also the iron salts reaction on the left hand specimen. (CD)

Russula velutipes (Dawn Brittlegill) is less common and has a paler cap than *R. vesca*: pink in the outer half with a more cream to orange centre. Its species name has suffered from several unfortunate and confusing changes in recent years: I first became familiar with it as *R. rosea* but another red species of Beech woodland (which we also found today) was then given this name

with our species then called *R. aurora*. However, as there is yet a further species named (confusingly) *R. aurea*, our species was eventually changed yet again to its present name of *R. velutipes* referring to its velvety smooth stem. Talk about muddling! At least its English name remains constant. We collected several specimens of *R. velutipes* today but I delayed suggesting a name until I'd checked it at home with a useful chemical test involving sulphuric acid – not to be treated lightly! A drop placed on the stem with some vanillin crystals then added turns bright carmine pink (in other similar species this test turns only dirty brown).

Right, *Russula velutipes* showing the typical pale cream centre with pink surround. Note the bright pink spot on the upturned cap where I'd added the drop of sulphovanillin. (PC)

Now for the common red species which usurped the name ***R. rosea*** and which I first knew as *Russula lepida* (Rosy Brittlegill) - are you still with me?! This one has a bright red cap with a matt cuticle which hardly peels at all and flesh which is really solid and firm, it also usually shows red to varying degrees on the stem as well. We found this today several times, but to prove how easy it is to make mixed collections of species, my photo includes one gate-crasher!

Left, mostly *Russula rosea* but at home the top left specimen proved to be a different species: *R. pseudointegra*. (PC)

We found 4 species of *Amanita* today including the deadly poisonous but common *A. phalloides* (Deathcap) and also the even more common *A. citrina* (False Deathcap) in its white rather than lemon yellow form: *var. alba*. A word here to clear up some confusion: There are two equally deadly poisonous *Amanita* species: the green-capped *A. phalloides* and the white-capped *A. virosa* (Destroying Angel). Both have a nauseous honey-like smell. The former is common in this area under deciduous trees, usually Oak or Beech, but confusingly can also be very pale to almost white when there is the possibility of confusion with *A. citrina* which, however, (as we experienced today) has a distinctive smell of potato peelings. The latter, *A. virosa,* always with a white cap, is much rarer, a northern species of acid soil found in mixed woodland – conifers and deciduous trees. The confusion lies in the fact that *A. citrina* is much more likely to be misidentified as *A. virosa* (Destroying Angel) by the less experienced despite its English name implying its likeness to *A. phalloides.* This is because *A. virosa* and *A. citrina* share the same or very similar coloured caps which are never green as is the norm in *A. phalloides*. Cautionary conclusion: if you like to collect fungi to eat, never be tempted to eat anything which might possibly be a species of *Amanita*!

Here we have examples of all three *Amanita* species treated in my discussion above. Before reading further see if you can name them. I've deliberately selected images showing a range of specimens. . . . . .

. . . . . Top left: *Amanita citrina* (False Deathcap) from Common Wood, Bucks. Bottom left: *Amanita phalloides* (Deathcap) taken here in Hodgemoor. Top right: *Amanita virosa* (Destroying Angel) taken a few weeks ago near Loch Ness. (PC)

My apologies for having waxed somewhat lyrical over just a few genera so far. Time to move on to cover a few more things worth mentioning. This is a well recorded site with a list of well over 700 species, thus adding new things is a challenge. Today, however, we contributed three new species, one of which was an unusual Inkcap found by Bob. It was a shame that Derek (our president and the country's recognised Inkcap expert) was not with us but this gave me the opportunity to look at a genus I don't often have reason to - Inkcaps are always handed straight over to him! When Bob said he'd found this one (already deliquescing into a fairly inky mess at the edge) inside the bole of a stump I was hopeful I'd be able to identify it when I got home before it became just a black puddle! There is one quite rare species, *Coprinopsis spelaiophila*, which grows on damaged deciduous trees often emerging from inside a wound or stump. I was able to confirm Bob's find was indeed this species by checking the detailed description and spore size, though there seems to be another name change imminent here. Watch this space!

Above, *Cantharellus ferruginascens* showing its rusty staining below. (PC)

Two small rather pale Chanterelles were found. Remembering that there's a pale species which stains rusty brown where damaged, I gave these two a good scratch when I was handed them and by the time we were home they had changed colour dramatically, making them ***Cantharellus ferruginascens*** (Pale Chanterelle). This has not many UK records and appears to be on the Red Data list as Near threatened though we've found it before several times both here and at Burnham Beeches. So it's probably not that rare but just not recognised as different by those who think that all Chanterelles belong to one rather variable species – in fact there are 7 different species, all well described in Geoffrey Kibby's

book already mentioned.

I can't leave this report without covering just a few more species. The many clumps of ***Gymnopus fusipes*** (Spindle Toughshank) we came across under both Oak and Beech were a feature of the morning. This species, though always common here, is often missing from fungi lists and is considered by many as an indicator species of ancient woodland. Apologies for not the greatest photo but it's just about good enough to serve as a prompt for those who attended today and hadn't met it before.

Right, *Gymnopus fusipes* was perhaps the commonest species we saw today. (PC)

Finally to a beautiful bracket species which turned up right at the end as we approached the carpark. We found four clustered brackets of ***Grifola frondosa*** (Hen of the Woods) on two different living Beech trunks, all at different stages of development. It's not that common but seems to be a species which appears some years and not at all in others – so one to look out for on mature Beech, Oak or Sweet Chestnut trunks elsewhere in the county.

Left, a perfect cluster of *Grifola frondosa* which ended our morning on a really high note. (RW)

My thanks to all attendees and especially to Chris and Roger for sending me their photos. I really enjoyed the morning, especially as it came as a complete surprise when I was expecting to be scratching around for things to collect and share with you. For more details of what we found see the separate complete list.

CD = Chris Dennis, PC = Penny Cullington, RW = Roger Wilding